

REMARKS

Claims 1, 4-10, and 12-23 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,173,044 (Hortensius) in view of U.S. Patent No. 6,064,673 (Anderson). Applicant hereby respectfully traverses this rejection.

Regarding the first reference, the examiner states that "Hortensius disclosed an apparatus which includes a remote system (Fig. 3c, ref. 250) including a converter (Fig. 3c, ref. 312 has a converter coupling to a modem for converting telephone transmission signals into audio signal 'read on audio output signal' for transmission to a central office from a computer having a modem and implicitly providing matching impedance) for receiving telephone transmission signal and providing an audio output signal."

Contrary to the Examiner's characterization, Ref. 250 of Fig. 3c. in Hortensius is a "path". For example at column 4, lines 1-4 Hortensius recites "the gateway (150) comprises a computer with connections (210) to the voice network (F), one or more routers (230), connected the data network (F) (110), and one or more paths (250)." "At column 4, lines 7-9 Hortensius recites "the gateway is shown here as comprising a number of paths (250), corresponding to each of one or more channels (210) on the T1 trunk line (185)." And at column 4, lines 17-19 Hortensius recites "also shown in Fig. 2 as a data connection from each path (250), to one or more routers (230), through which each path (250) has access to the data network(s) 110."

Applicant respectfully submits that the "path (250)" in Hortensius does not teach or suggest a remote system according to the present invention wherein "in the typical modem pool configuration, a local computer (such as at a service facility) may be available to receive communications, such as status or error information from one or more remote systems."

Specification, page 2, lines 15-18.

Applicant also respectfully submits that contrary to the examiner's characterization, reference number (312) of the Fig. 3.c. in Hortensius is actually an SVD (simultaneous voice data) modem. At column 4, line 63- column 5 line 8 Hortensius recites "if the calling SVD client (145) wishes to place a voice call (350) to telephone unit (135) (note that there is no computer to process data here), and a data call to a destination on the network 110, the voice channel of the SVD call is split (333) from the combined voice and data stream by SVD (312) and is passed to DU (314) for decompression. Subsequently, the voice stream part (350) of the voice and data stream (350) is routed via another channel (210) through the voice network (115), to the telephone (135). In a similar fashion, voice (352) from telephone (135) is routed through the CU (316), and is then passed through the SVD modem (312), through the TI channel (210), and through the voice network (115) to the SVD client 145B." Applicant respectfully submits that contrary to the examiner's characterization, Hortensius does not teach or suggest any converter or any converter coupling to a modem.

Applicants claim (1) recites "a remote modem configured in said remote modem," "a converter electrically connected to a telephone interconnection of said remote modem and splitting a portion of said telephone transmission signal there from and providing an audio output

signal," "an interface machine ... including a first sound processing mechanism," "audio output signal for transmission over said WAN," "a second sound processing mechanism ... at the local system," and "processing ... to provide a continuous audio signal at said local system," along with additional corresponding functional requirements. Hortensius does not disclose or suggest these particular elements, nor the particular relationship of these elements.

Similarly, the Anderson reference does not disclose or suggest these particular elements in the particular relationship as disclosed and claimed by Applicant. Regarding the second reference, the examiner states that "Anderson discloses (Fig. 1-3 and Col. 1, lines 55 to Col. 7, lines 38) an interface machine (Fig. 1 is a computer as an analog line interface Codec "Ref. 16" for converting a transmission signals into the audio signal then generating packets having the digitized audio signal by using a sound mechanism for transmitting via WAN 104 to another computer, which have an address, has a sound mechanism, for processing the network audio packet; see Col. 5, lines 9-45) for processing a received telephone signal into a network audio signal for transmitting via WAN, (Fig. 1, ref. 32b) to a local system (Col. 5, lines 5-8, a computer implicitly has a WAN address) which has an WAN address is a multimedia computer with a sound processing software for converting a network signal into a continuous audio signal) having second sound mechanism for processing received network audio signal into a continuous audio signal and an automated attendance system (Fig. 1, performing automated attendant management, See Col. 4, lines 36-48) for gathering information See Col. 5, lines 46-55)."

Although the Examiner characterizes Anderson in a manner to suggest that it discloses Applicant's claimed invention, the cited reference actually recites "an analog telephone line interface module (TLIM) unit, 16" at Col. 4, lines 29-30. Wherein "the system 10 also includes

an analog TLIM unit 16 that connects to the central office (CO) 32A of a telephone service provider via the public switched telephone network (PSTN). The unit 16 can include any number of TLIMs for continuing expansion of the system 10". Applicant respectfully submits that this reference does not teach or suggest an interface machine according to the present invention wherein "the interface PC running the audio streaming program packetizes and puts the telephone audio signal into the WAN for transmission to the local computer." Specification lines 24 to 26.

Contrary to the examiner's characterization, at Col. 5, lines 9-45 Anderson discloses:

The various components in the system 10 are controlled by embedded software. The fundamental goals of this software are to generate packets of digitized audio signals within the sending peer communication device and send such packets to the appropriate receiving peer communication device. The receiving device simultaneously interprets received audio signals and generates audio signals from the audio packets, while at the same time sending its own signals. This process is complicated by the analog TLIM interface, the digital TLIM interface, the WAN/internet interface, the voicemail and automated attendant connections, not to mention the other voice and data traffic on the network 20. To overcome these problems, the software performs various control functions that are capable of managing voice traffic in such a complicated environment. At the core of the system are the protocols necessary to transport the voice traffic.

Fig. 2 is an illustration of the protocol stack utilized in the system. The protocol stack (40) includes an application layer (42), an audio packetization layer (44), an audio depacketization layer (46), a call control layer (48), and Ethernet layer (50) and hardware abstraction layer (HAL) (52). HAL (52) is a software layer that refers to certain hardware functions performed by the peer devices on the system (e.g., telephones, analog and digital TLIMs, WAN/internet gateway, the SPU, voicemail and automated attendant). At the HAL (52), audio signals are converted to digital data for the application layer (42) and digital data received from the application layer is converted to audio signals. The application layer (42) passes digital data to the audio packetization layer (44) and receives digital data from the audio depacketization layer (46) the audio packetization layer (44) provides data packets to and the depacketization layer (46)

receives data packets from the call control layer (48). The control layer provides data packets to and receives data packets from the Ethernet layer (52). The details of the data flow through the protocol stack are explained below.

Contrary to the Examiner's characterization, the referenced section of Anderson does not teach or suggest "an interface machine splitting the portion of said audio output signal from said converter, said interface machine including a first sound processing mechanism processing said audio output signal for transmission over said WAN as a network audio signal" as claimed.

The Examiner references Fig. 1 ref. 32(b) of Anderson as teaching "for processing received telephone signal into an network audio signal for transmitting via WAN" or a portion thereof. Reference 32(b) in Fig. 1 of Anderson is actually described at Col. 5, lines 2-5 which recites "the digital TLIM unit (28) includes any number of digital TLIM modules for connecting to public or private digital telephone networks (e.g., ISDN, PRI, BRI, T1/E1) 32(b). Applicant respectfully submits that this reference does not teach or suggest anything to do with the claimed elements of "send said interface machine including a first sound processing mechanism processing said audio output signal for transmitting over said WAN as a network audio signal" or any other claimed element in the present invention.

Contrary to the examiner's characterization of Anderson at Col. 5, lines 5-8, Anderson actually recites "a multi-protocol router (30) as an off the shelf device that connects the system (10) to a WAN or the internet (34) for communications with remote telephones or telephony interfaces (such as PC's). Applicant respectfully submits that this reference does not teach or suggest any of the claimed elements of the present invention. Furthermore Applicant cannot follow the Examiner's reference to determine which of the claimed elements or which reference in this specification the examiner is referring to when he recites "which has an WAN address is a

multi-media computer with a sound processing software for converting a network audio signal into a continuous audio signal". Applicant's claims recite "a remote modem configured in said remote system," "a converter electrically interconnected to a telephone interconnection of said remote modem and splitting a portion of said telephone transmission signals therefrom and providing an audio output signal," "an interface machine ... including a first sound processing mechanism," "audio output signal for transmission over said WAN," "a second sound processing mechanism ... at the local system," and "processing ... to provide a continuous audio signal at said local system," along with additional corresponding functional requirements. Nothing in the cited Hortensius and Anderson references, alone or in combination, discloses or suggests Applicant's claimed invention.

The Examiner has not established prima facie obviousness of Applicant's claimed invention, therefore, Applicant respectfully requests reconsideration and allowance of the pending claims. The Examiner is invited and encouraged to telephone the undersigned with any concerns in furtherance of the prosecution of the present application.

Please charge any deficiency as well as any other fee(s) which may become due at any time during the pendency of this application, or credit any overpayment of such fee(s) to Deposit Account No. 50-0369. Also, in the event any extensions of time for responding are required for the pending application(s), please treat this paper as a petition to extend the time as required and charge Deposit Account No. 50-0369 therefor.

Respectfully submitted,

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